LIMITED ONE YEAR WARRANTY

Chaney Instrument Company warrants that all products it manufactures to be of good material and workmanship and to be free of defects if properly installed and operated for a period of one year from date of purchase. REMEDY FOR BREACH OF THIS WARRANTY IS EXPRESSLY LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE ITEMS. Any product which, under normal use and service, is proven to breach the warranty contained herein within ONE YEAR from date of sale will, upon examination by Chaney, and at its sole option, be repaired or replaced by Chaney. In all cases, transportation costs and charges for returned goods shall be paid for by the purchaser. Chaney hereby disclaims all responsibility for such transportation costs and charges. This warranty will not be breached, and Chaney will give no credit for products it manufactures which shall have received normal wear and tear, been damaged, tampered, abused, improperly installed, damaged in shipping, or repaired or altered by others than authorized representatives of Chaney.

THE ABOVE-DESCRIBED WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND ALL OTHER WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. CHANEY EXPRESSLY DISCLAIMS ALL LIABILITY FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES, WHETHER ARISING IN TORT OR BY CONTRACT FROM ANY BREACH OF THIS WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. CHANEY FURTHER DISCLAIMS ALL LIABILITY FROM PERSONAL INJURY RELATING TO ITS PRODUCTS TO THE EXTENT PERMITTED BY LAW. BY ACCEPTANCE OF ANY OF CHANEY'S EQUIPMENT OR PRODUCTS, THE PURCHASER ASSUMES ALL LIABILITY FOR THE CONSEQUENCES ARISING FROM THEIR USE OR MISUSE. NO PERSON, FIRM OR CORPORATION IS AUTHORIZED TO ASSUME FOR CHANEY ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS. FURTHERMORE, NO PERSON, FIRM OR CORPORATION IS AUTHORIZED TO MODIFY OR WAIVE THE TERMS OF THIS PARAGRAPH, AND THE PRECEDING PARAGRAPH, UNLESS DONE IN WRITING AND SIGNED BY A DULY AUTHORIZED AGENT OF CHANEY. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

For in-warranty repair, please contact:

Customer Care Department Chaney Instrument Company 965 Wells Street Lake Geneva, WI 53147

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1- This device may NOT cause harmful interference, and

2- This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, There is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and the receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

Patent numbers: 5,978,738; 6,076,044; 6,597,990; US 7,637,141 B2





Professional Weather Center

Instruction Manual

- I Introduction: About the Professional Weather Center
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Parts List model #01050

- 1. Display console
- 2. 5-in-1 multi-sensor
- 3. 5-in-1 multi-sensor mounting bracket
- 4. Snap-in debris filter for 5-in-1 rain collector
- 5. Mounting hardware

Introduction

The AcuRite® Professional Weather Center with 5-in-1 Sensor collects outside weather data and sends the data via wireless signal to the included Display Console via a low-power radio frequency. This weather center has been designed to be easy to install and use, without compromising any of the professional weather tracking features you want.

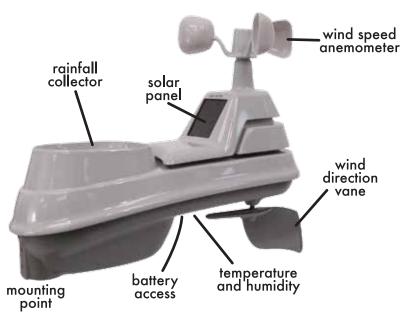
The AcuRite® 5-in-1 Multi-Sensor is completely wireless and contains a self-emptying rain collector for measuring rainfall, temperature/humidity sensor, anemometer, and a wind vane. The anemometer measures wind speed, and the wind vane measures wind direction. The 5-in-1 Multi-Sensor is battery powered and features a solar panel for powering an internal aspirating fan. The internal fan will assist in drawing ambient air through to reduce the heating effects of solar radiation, resulting in a more accurate air temperature measurement.

The sleek display console houses a liquid crystal display (LCD) which will calculate and display all the weather data received from the Integrated Multi-Sensor outside. The Display Console has weather features such as daily/weekly/monthly/yearly record highs and lows, and an area for displaying the weather forecast.

The weather forecast features Precision-Forecasting technology, which allows you to select one of seven geographic regions to give you a detailed, accurate forecast for the next 12 hours- from your own backyard! The forecast predicts your cloud cover, high and low temperatures, and chance of precipitation over the next 12 hours by analyzing your weather patterns and changes in great detail.

Please read through this manual to learn more about the AcuRite® Professional Weather Center. Keep this manual for future reference.

5-in-1 Multi-Sensor Features

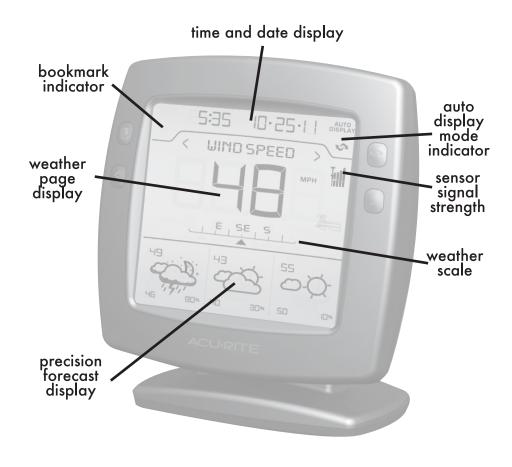


Display Console Features

backlight button



Display Features

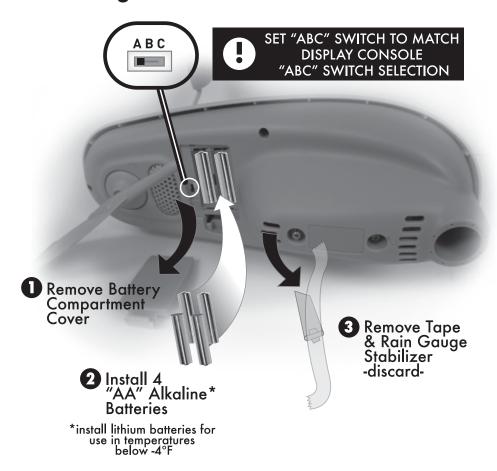




2

on back

Installing Batteries - 5-in-1 Sensor



BATTERIES MUST BE INSTALLED FOR THE INTEGRATED SENSOR TO OPERATE

The integrated sensor features a solar cell for collecting sunlight and converting it into usable power, this feature is intended to EXTEND the life of the batteries you install. This sensor REQUIRES batteries be installed to operate, and will not function on solar power alone.

PLEASE DISPOSE OF OLD OR DEFECTIVE BATTERIES IN AN ENVIRONMENTALLY SAFE WAY AND IN ACCORDANCE WITH YOUR LOCAL LAWS AND REGULATIONS.

Installing Batteries - Display Console



About the Self Setting Intelli-Time® Clock

Your new weather station is equipped with Intelli-Time® technology which is pre-programmed with the correct time and date. Intelli-Time® technology instructs the clock to set itself once batteries are installed. All you need to do is select your Time Zone and Daylight Saving Time preferences. The clock will automatically set itself and change automatically for Daylight Saving Time.

Installing the Wireless 5-in-1 Multi-Sensor

After installing batteries into the Wireless Multi-sensor, you must choose a location to install the sensor. To ensure that your professional weather center performs at its best, follow these guidelines to choose a mounting location for the wireless multi-sensor:

• INSTALL AWAY FROM HEAT & HUMIDITY SOURCES:

DO NOT Place the wireless multi-sensor near localized heat sources like heaters, air conditioners, chimneys and exhaust vents. Install the wireless multi-sensor away from asphalt or concrete as these surfaces radiate heat from the sun. Also avoid installing the sensor near pools, spas, or other bodies of water as these water sources may affect the accuracy of the humidity.

INSTALL AWAY FROM SPRINKLER HEADS:

DO NOT install the wireless multi-sensor where it will be directly sprayed by a sprinkler system, this will affect the rainfall measurement accuracy and may force water into the housing.

WIND & RAIN OBSTRUCTIONS:

DO NOT mount the sensor with obstructions above it, as this will ensure proper rainfall measurement. Also consider a mounting location that has very little structures around the sensor, to ensure proper wind speed and direction measurements.

• INSTALLATION HEIGHT:

D0 Mount the wireless multi-sensor at least 5 feet off the ground (higher is better for accurate wind measurements) in an open area NO FURTHER than 300 feet (100 meters) from the display console. A typical installation would involve mounting the bracket to a secured length of 2x4 or 4x4 wood (not included).

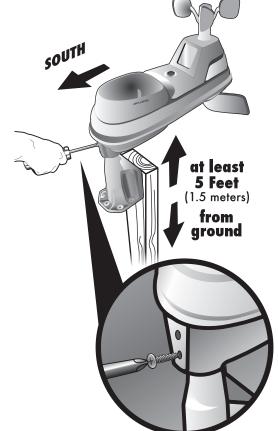
• LEVEL INSTALLATION:

DO Install the wireless multi-sensor as level as possible to ensure accurate rain and wind measurements. Use the bubble level on the top to ensure a level installation.

SOLAR CELL ORIENTATION:

DO Install the sensor onto the mounting bracket with the **solar cell facing SOUTH**. This is important to ensure that the cell receives as much sun as possible, and also orients the wind direction properly.

NO OBSTRUCTIONS ABOVE OR AROUND



Install the wireless multi-sensor with the solar cell facing south to properly orient the wind direction vane.

Choose an open location with no obstructions above or around the sensor for accurate rain and wind measurement.

Secure the included sensor mounting bracket to a post or pole (not included) utilizing the included hardware.

TO CLEAR FALSE DATA COLLECTED DURING INSTALLATION:

During the process of installation, internal sensors may have been triggered-resulting in erroneous rainfall measurements. When installation is complete, you may want to clear out the erroneous data from the display consoles memory.

To clear out the display consoles memory without having to reset the clock and re-establish communication, see "Weather Category History Functions" on page 16 and clear today's total.

Quick Setup - Display Console

After installing batteries, the Intelli-Time® clock and calendar will automatically set to the correct time, all you need to do is select your time zone.



PRESS THE "zone" BUTTON UNTIL YOUR TIME ZONE IS SELECTED. THE "zone" BUTTON IS LOCATED IN THE BATTERY COMPARTMENT.



NOTE: IF FRENCH OR SPANISH LANGUAGE IS SELECTED (SEE MANUAL SETUP TO CHANGE LANGUAGE),
THE TIME ZONE SELECTION ON THE DISPLAY WILL BE G.M.T. -/+ HOURS

Next, you will need to select your general geographic region for the Micro-Forecast to function properly. The Micro-Forecast feature analyzes outdoor temperature, outdoor humidity, pressure changes and geographic region information to give you the most accurate forecast a single station forecast can provide.

PRESS THE "geo" BUTTON REPEATEDLY
UNTIL YOUR GEOGRAPHIC ZONE IS
SELECTED. THE "geo" BUTTON IS
LOCATED IN THE BATTERY COMPARTMENT







♥ Manual Setup - Display Console

Press the SET () button to enter into manual set mode. The currently selected language will display("ENGLISH is default)

To adjust the currently selected (flashing) preference item, press and release the "♠" or "▼" buttons.

To save your adjustments, press and release the "\$\overline{\text{\$\sigma}}\" button again to move on to adjusting the next preference. You will automatically exit SET MODE if no entries are made for 30 seconds. You may enter basic setup mode again at any time by pressing and releasing the "SET" button.

The preference set order is as follows:

LANGUAGE (English, Spanish or French)

TIME ZONE (PST MST CST EST AST HAST AKST)

AUTO DST (Automatically adjust time -/+ on DST calendar dates)

CLOCK HOUR

CLOCK MINUTE

CALENDAR MONTH

CALENDAR DATE

CALENDAR YEAR

UNITS: temperature (°f or °c), wind (mph, kph, kn), rain (in. or mm),

pressure (inha or hpa)

SENSOR TYPE: (large 5in1 e or smaller 3in1 ?)

NOTE: This weather station came with a 5in1 sensor, this display console was designed to work with either a 5in1 OR a 3in1 sensor-but not both at the same time. It is recommended that the larger 5in1 sensor be selected for proper operation.

Adjustable Stand - Display Console

To adjust the display for optimum viewing angle, loosen the locking knobs and gently tilt the display to the desired angle. Re-tighten the knobs to set the angle.

Basic Functions

The Professional Wireless Weather Center was designed to give you the most useful information at a glance. The following is an overview of basic functions for everyday use.

WEATHER PAGE DISPLAY:

The weather page display area will show you information about the currently selected weather type. The weather scale will show you additional information, like trend or wind direction. You may also access history records for the currently selected weather page.

MANUALLY BROWSE WEATHER PAGES: You may manually browse through the available weather pages at any time by pressing the "<" or ">" buttons located on the front of the display console

WIRELESS SIGNAL RECEPTION ICON:

The display console features a "SENSOR" signal reception icon to the left of the clock display area. If there are a low number of "bars" present, you may experience no temperature display ("-") or inaccuracy. Occasionally, due to intermittent physical obstructions (such as vehicle traffic, etc.) or other environmental interference, the signal may be lost. If the sensor batteries are low the signal will be lost as well. After a signal loss- the display console will automatically begin to search for the wireless multi-sensor and attempt to re-acquire the wireless signal. In the event that the signal is lost completely and cannot be re-acquired, the antennae icon will flash with no bars.

In the case that the sensor signal is lost completely, you may need to relocate the display console or the wireless multi-sensor.



(flashing)







Display Modes

The weather page display has three distinct viewing modes- Manual, Cycle or Auto-Display. To change between these modes, press the display button " located on the front of the display console.

- MANUAL: (default) In manual display mode, whichever weather page you browse to will remain on the display.
- CYCLE: In cycle display mode, the display will automatically cycle through all available weather pages. Each page will be displayed for approximately 5 seconds. Note that you may still manually browse through the weather pages at any time by pressing the browse buttons, but the display will begin to cycle again after 5 seconds of no activity.
- **AUTO-DISPLAY:** In this mode, whichever weather pages have adverse conditions being reported will display automatically. For example, with auto display mode selected- if it begins to rain, the "RAINFALL" weather page will automatically display. If multiple weather pages report adverse conditions (example; RAINFALL/IN-TEMP), all of the affected weather pages will automatically display in a cycle until the conditions return to "normal". After conditions normalize, the weather page that was previously selected will display again.

BOOK MARK:

The bookmark feature allows you to quickly view the weather page that is most important to you, no matter what display mode you are in.

You may "bookmark" your favorite weather page by pressing AND HOLDING the " " button. This will bookmark the currently selected category and allow you to quickly go to that category at any time.

To go to your book marked page, press AND RELEASE the " 📙 " button at any time. Note that the weather page may change after 5 seconds if you are in CYCLE or AUTO DISPLAY modes. If you would like to remain on your book marked weather page, press the "" button to select manual display mode (< >).

Weather Scale

The display console features a weather scale, a graphic representation of the rate of change for a particular weather page. For most weather pages, this scale will simply show the rate of increase or decrease.

For example, when pressure weather page is being viewed, the scale example here is showing that the pressure is falling rapidly.



In this example, the outdoor temperature weather page is being viewed, the scale example here is showing that the temperature is staying relatively steady, with only a slight rise in temperature.



When the wind speed page is displayed, the weather scale converts automatically to show you a linear wind direction scale. In this case, the wind is coming out of the WEST at 12 m.p.h.



Weather Forecast

Initial learning mode

The Forecast will not display predicted high or low temperatures or chance of precipitation for the first few hours after powering on. During this initial learning mode, the weather forecaster will observe minute changes to learn your weather patterns and increase the accuracy of the initial forecast. Note that the forecast will become more accurate as it obtains more information about your micro climate.

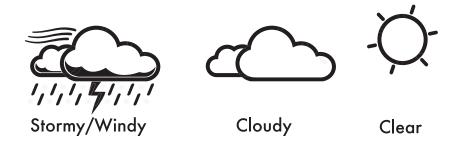
Forecast Display

The forecast display area gives you the predicted weather forecast for the next 4 hour, 4 to 8 hour, and 8 to 12 hour time periods. Each time-period will also display the predicted High and Low temperatures, as well as the chance (%) for precipitation.

The forecaster is always analyzing the available data, and consistently updates the forecast icons and highs/lows/precipitation chance as time goes on. This will help you to plan ahead for the next 12 hours of weather at any given time.

The weather forecast icon will display one of 18 different weather conditions. The Moon will show (as a simplified Moon Phase) instead of the sun when the forecast time period occurs overnight.

Below is an example of just three of the 18 forecast icons.



Atmospheric Pressure

The display console features a "PRESSURE" weather page.



LEARN MORE>

Atmospheric Pressure is defined as the pressure at any location on the Earth, caused by the weight of the column of air above it. At sea level, atmospheric pressure has an average value of one atmosphere and gradually decreases as altitude increases. Also called barometric pressure.

The weight of the air mass, or atmosphere, that envelopes Earth exerts pressure on all points of the planet's surface. Meteorologists use barometers to measure this atmospheric pressure (also called barometric pressure). At sea level the atmospheric pressure is approximately 1 kilogram per square centimeter (14.7 pounds per square inch), which will cause a column of mercury in a mercury barometer to rise 760 millimeters (30.4 inches). Subtle variations in atmospheric pressure greatly affect the weather. Low pressure generally brings rain. In areas of low air pressure, the air is less dense and relatively warm, which causes it to rise. The expanding and rising air naturally cools, and the water vapor in the air condenses, forming clouds and the drops that fall as rain. In high pressure areas, conversely, the air is dense and relatively cool, which causes it to sink. The water vapor in the sinking air does not condense, leaving the skies sunny and clear.

Rainfall

The RAINFALL weather page will display the rainfall total from the current rain event. A weather system may come into your area very slowly, and may rain over many hours or days without many breaks. The rainfall weather page displayed event total accounts for this and will continue to display the total until the rain event is over.

TO ACCESS TODAY, WEEK, MONTH, YEAR RAINFALL TOTALS:

While viewing the rainfall weather page, pressing the "\u2204" button repeatedly will display the recorded RAINFALL TOTALS for TODAY, WEEK, MONTH, and YEAR. Note that the time and date will change to display exactly when the record was observed.

To clear out an erroneous record, press and HOLD the "\underwind" button while you are viewing the actual record you want to clear.

Wind Speed

CURRENT WIND SPEED:

The CURRENT wind speed will display the currently recorded wind speed and is updated every 18 seconds.

WIND SPEED PEAK:

The WIND SPEED PEAK will display the highest wind speed recorded in the previous 60 minutes.

TO ACCESS TODAY, WEEK, MONTH, YEAR HIGHEST WIND RECORDS:

While viewing the wind speed weather page, pressing the "\state*" button repeatedly will display the recorded highest WIND SPEED for TODAY, WEEK, MONTH, and YEAR. Note that the time and date will change to display exactly when the record was observed.

To clear out an erroneous record, press and HOLD the "A" button while you are viewing the actual record you want to clear.

Weather History

The display console can display short and long term records. To access history records for the currently displayed weather page, press the "▲" or "▼" buttons located on the **back** of the display console.

THIGH RECORDS: Pressing the "♠" button repeatedly will display the recorded HIGHS for TODAY, WEEK, MONTH, and YEAR for the currently selected weather page. Note that the time and date will change to display exactly when the record was observed.

To clear out an erroneous HIGH record, press and HOLD the "A" button while you are viewing the HIGH record you want to clear.

▼LOW RECORDS: Pressing the "▼" button repeatedly will display the recorded LOWS for TODAY, WEEK, MONTH, and YEAR for the currently selected weather page. Note that the time and date will change to display exactly when the record was observed.

To clear out an erroneous LOW record, press and HOLD the "▼" button while you are viewing the LOW record you want to clear.

NOTE: For some weather pages, LOW and/or HIGH may not be applicable. For example, rainfall is an accumulative weather type, and would always have a low of "0.0". For that reason, the rainfall and wind weather pages do not have LOW records display options.

DISPLAY CONSOLE MAINTENANCE:

Clean with a soft damp cloth, do not use caustic cleaners or abrasives as these will damage the finish on the display console. Keep away from dust and dirt and moisture, dust ventilation ports regularly with a gentle puff of air, this will keep the indoor temperature and humidity accurate.

INTEGRATED WIRELESS SENSOR MAINTENANCE:

Clean the housing with a damp cloth, do not use abrasive cleaners or any materials that will mar the polished surfaces of the rain collection funnel or the solar panel- this will result in decreased performance and reliability.

Occasionally remove the rain collector screen cup and empty it. This will filter out seeds and small sticks, etc. (the rain collector screen cup is located within the rain funnel- remove from the top gently by squeezing and pulling out).

Remove any foreign matter on the outside of the housing to allow for free movement of wind vane and anemometer.

INSECTS: in most cases, insects will not pose a problem. However, in some instances, insects may cause repeated obstructions to weather measurement by nesting in or contaminating the integrated wireless sensor. In these cases, it may help to spray the housing with a commercially available home insect guard/repellent product (not included) to limit the problem. Please consult the insect repellent manufacturers instructions and safety information before using.

BATTERY SAFETY: Clean the battery contacts and also those of the device prior to battery installation. Remove batteries from equipment which is not to be used for an extended period of time. Follow the polarity (+/-) diagram in the battery compartment. Promptly remove dead batteries from the device. Dispose of used batteries properly. Only batteries of the same or equivalent type as recommended are to be used. DO NOT incinerate used batteries. DO NOT dispose of batteries in fire, as batteries may explode or leak. DO NOT mix old and new batteries or types of batteries (alkaline/standard). DO NOT use rechargeable batteries. DO NOT recharge non-rechargeable batteries.

| Problem | Possible Solution(s) |
|---|---|
| Bad Wireless Sensor Reception Till no bars | Relocate the main unit and/or the wireless sensor. Both units must be within 330 feet (100 meters) from each other. Make sure both units are placed at least 3 feet (.91 m) from other electronic appliances and devices that may interfere with the wireless communication (such as TV's, microwaves, computers etc). NOTE: It may take up to 20 minutes for the main unit to re-synchronize with the sensor when batteries are replaced. Use lithium batteries in sensor when temperature is below -4°F (-20°C). Make sure the A-B-C switch selection in the battery compartments of the display unit and sensor match. |
| Display Console Screen Not Working | Batteries may need replacing. Check that batteries are correctly installed. Reset the display unit and wireless sensor. |
| Micro Forecast displaying "" for highs/lows/ precipitation% | The Micro Forecast will not display predicted high or low temperatures or chance of precipitation for the first few hours after powering on or resetting. During this initial learning mode, the weather forecaster will observe changes to learn your weather patterns and increase the accuracy of the forecast. |
| Micro Forecast Inaccuracies | As with any weather forecast, 100% accuracy is not possible. However, if the micro forecast seems wildly inaccurate, make certain that your geographic region is selected properly. The geographic region selection can drastically affect the accuracy of the forecast. |
| NOTICE: The display may fail to start properly due to static discharge. Press the reset button located on the back of the display | |



reset

Please DO NOT return product to the retail store. For technical assistance and product return information, please call Customer Care: **877-221-1252** Mon. - Fri. 7:00 A.M. to 7:00 P.M. (CST)

unit to reset the entire unit. Please note that all of the date and time

information will need to be entered manually after a reset.

Set Wireless I.D. This wireless thermometer uses long range 433mhz radio frequency for communication. In the event that you have reception problems due to interference, both the main unit and the wireless sensor have a selectable wireless ID. The ID switches are located within the battery ABC compartments of the display console and the integrated wireless sensor.

You may choose A, B or C; but both the main unit and the wireless sensor ID's must match for successful synchronization. Both wireless ID switches must match

ABC



Product Facts

Measurement Ranges

Outdoor Temperature: -40°F to 158°F

-40°C to 70°C

Outdoor Humidity: 1% to 99%

Outdoor temperature and humidity sensors are internally fan aspirated to provide accurate readings, even in sunlight

Wind Speed:

0 to 99mph

0 to 159 kph

Wind Direction Indicators: 16 points

Rainfall: 0 to 99.99 in.

Indoor Temperature: 32°F to 122°F

0°C to 50°C

Indoor Humidity: 1% to 99%

Backlight: Blue

10-second momentary backlight

Wireless Range: 330 ft / 100 m MAX Depending on home construction materials

Transmission: Updates every 18 sec.

www.**AcuRite**.com

Micro Forecast Geographic Region Selections

